ISSN 1059-1249

The Magic Lantern Gazette

A Journal of Research

Volume 31, Number 4 Winter 2019

The Magic Lantern Society of
the United States and Canada

www.magiclanternsociety.org

I am making the final preparations for this issue of the *Gazette* to go to the printer on July 4, 2020, which is appropriate given the theme of our feature article. Mark Gosser reviews the engagement of the Founding Fathers of the United States with the magic lantern, both in terms of actual familiarity with magic lantern shows and the appearance of magic lantern metaphors. Magic lantern shows appeared in the American colonies at least as early as 1743 and could have been seen by many of the leading citizens of the time. In addition, figures such as Benjamin Franklin, John Adams, Thomas Jefferson, and James Madison had a strong interest in science, traveled in Europe, knew many of the leading scientists of the day, and purchased scientific instruments for themselves or each other. Franklin and others such as Benjamin Rush were involved in stocking "natural philosophy cabinets" of various educational institutions, including Harvard, with instruments such as magic lanterns for use in teaching. Most research on magic lanterns has tended to focus on the 19th century, especially the second half of the century, so Mr. Gosser's article on the 18th century is particularly welcome.

This issue also contains a review of a new scholarly book on *The Magic Lantern at Work*, which grew out of an academic conference held in Australia in 2017. It highlights the work of seasoned magic lantern scholars and younger researchers in Australia and around the world and reveals much new information on previously unknown lantern lecturers and showpersons. The appearance of this volume, as well as several other recent edited books and special issues on the magic lantern in *Early Popular Visual Culture*, marks the firm establishment of magic lantern research as a legitimate academic field in its own right, not just as an adjunct to cinema history.

The scholarly work published by our society and our sister society in the UK have helped to establish this field of research. Ironically, while academic work on the magic lantern has flourished, it has become difficult to obtain research contributions for the *Gazette* sufficient to maintain a regular quarterly publication schedule.

Consequently, the quarterly *Magic Lantern Gazette* will have a new format with a broader range of topics beyond lengthy scholarly articles. Indeed, the first 2020 issue has already appeared while this last 2019 issue was delayed. However, I will continue to edit scholarly articles in a periodic *Magic Lantern Gazette Research Supplement*, which will look much like this issue. In addition to scholarly articles of almost any length on the magic lantern and related topics, I will continue to summarize recent research from academic journals in The Research Page and publish reviews of scholarly books, several of which are currently in the works. The frequency with which this *Supplement* appears will depend on future contributions, which can be sent directly to me.

Kentwood D. Wells, Editor
451 Middle Turnpike
Storrs, CT 06268
kentwood.wells@uconn.edu
860-429-7458

George Washington at Valley Forge.

The Founding Fathers and the Magic Lantern in 18th Century America

H. Mark Gosser

3200 Ridge Pike, P.O. Box 144
Eagleville PA 19408

In the early decades of the 18th century, the range of public entertainments available to colonial Americans was quite limited. In most of the colonies, theaters and concert halls did not exist, in some cases because of religious objections and in others because city populations were too small to support permanent entertainment venues (in 1730, Boston had about 13,000 residents, while New York and Philadelphia each had roughly 8500 residents). Travel between cities was difficult, with a small network of terrible roads doing as much to separate the colonies as to unite them. This limited opportunities for traveling performers and showmen. Nevertheless, some itinerant performers managed to set up shop at local fairs, marketplaces, and other venues. Usually they offered fairly simple entertainment featuring acrobats, tightrope walkers, and clowns performing tricks and telling jokes. Exhibitions of exotic animals, including monkeys, bears, lions, and camels were popular in Philadelphia beginning in the 1720s and continued for the rest of the century.[1]

As the colonial population grew rapidly (Philadelphia reached 34,000 residents by 1775), so too did the variety of public entertainments. Starting around 1740, itinerant showmen brought magic lanterns and other visual spectacles to major cities, a form of entertainment that had been well established in Europe since the late 17th century. Certainly the atmosphere in the colonies was ripe for such amusements. The magic lantern helped satisfy an aesthetic hunger for different types of optical entertainment and visual illusions, which was an element of the American cultural psyche during these early years. Thus instruments like the lantern contributed to a fascination with *deceptiones visus* in the late colonial and post-revolutionary populace. In Philadelphia, New York, Boston, Williamsburg, Richmond, Albany, Charleston and Baltimore, magic lanterns, peep shows, shadow plays, perspective boxes, and the like helped sate the public's appetite for the optically new, the bizarre, and the scientific.

This article explores the evidence for magic lanterns being an integral part of colonial and early American culture, with a particular focus on the engagement of our Founding Fathers and their close associates with the magic lantern. These were among the best educated men in America, and many had traveled in Europe, so they would have been aware of current advances in science and the arts. Evidence considered here includes announcement of magic lantern shows, advertisements offering magic lanterns for sale, and the letters and other writings of the leading citizens of the day.[2]

The Magic Lantern in Colonial American Culture

One of the first published records of a magic lantern show in America is a 1743 advertisement in a Philadelphia newspaper:

> Joseph Barber is removed two Doors from the House he formerly lived in, and has a good new Stable and Yard, and as good Entertainment for Man and Horse as ever.
>
> At said Barber's, at the Temple Bar, in Second-street, Philadelphia, The
>
> **MAGICK LANTHORN,**
>
> By which Friar Bacon, and other famous Men performed such wonderful Curiosities, as made the Ignorant believe were done by Magic, Conjuration or Witchcraft, representing upwards of 30 humorous and curious Figures, larger than the Life; To be seen every Week Day from 6 to 9 in the Evening, and on Market Days, that the Country as well as Town may partake of such an agreeable Amusement, from 9 in the Morning till 9 at Night, by six or more in Company: And tho' it exceeds any Thing of the Kind ever shewn in the Province, the Price is only SIX PENCE each.[3]

The showman who presented the lantern was Richard Brickell, who was in Philadelphia from December 1742 through February 1743.[4] Later that year, Boston instrument-maker John Dabney (f1.1720-1750) advertised a magic lantern show in the *Boston Evening Press*:

> To be shewn by John Dabney, Mathematical Instrument maker in Milk Street, Boston, on Monday, Tuesday and Thursday evenings, from five to eight o'clock, for *the Entertainment* of the Curious, the magic lanthorn, an Optick machine, which exhibits a great number of wonderful and surprising Figures, prodigious large and vivid, at Half a Crown each, Old Tenor![5]

Richard Brickell, who had shown his magic lantern at the Temple Bar in Philadelphia in 1743, continued as an itinerant showman for the next 13 years, exhibiting his magic lantern and other attractions, including waxworks, musical clocks, musical machines, and electrical instruments. He appeared in taverns and private homes, mostly in Philadelphia and New York, but once as far as Charleston, South Carolina.[6] In September 1746, The *New-York Evening Post* published a long advertisement for one of Brickell's shows, "at the House of Mr. Wood Furmans, near the Fly-Market." The show began with the exhibition of an elaborate Musical Machine with mechanical figures, followed by the Curious and Surprising Magick Lanthorn,

> By which Friar Bacon, Doctor Faustus, and others, perform[ed] such wonderful Curiosities, representing upwards of 30 humorous and entertaining Figures, larger than Men or Women; as the Rising Sun, the Friendly Travellers, the Pet Companions, the Blind Beggar of Gednal Green and his Boy, the Merry Piper dancing a Jigg to his own dumb Musick, the Courageous Fencing Master, the Italian Mountebank or famous infallible Quack, the Man riding on a Pig with his face towards the Tail [Fig. 1], the Dutchman skating on the Ice in the midst of Summer; with a great Variety of other Figures equally diverting and curious, too tedious here to mention.[7]

Fig. 1. Hand-painted lantern slide of a man riding backwards on a pig, as shown by Richard Brickell in the 1740s. Dick Moore collection.

In 1767, "The Noted Henry Hymes, lately from Sadler's-Wells," who claimed to have performed before most of the Nobility and Gentry in Europe and America," offered a program of acrobatic feats, balancing acts, and juggling, along with "a curious Magick Lanthorn, which presents several Images near 6 Feet high, &c. &c., with five Images dancing to a Piece of Musick in the Form of Clock-Work."[8] This type of mixed entertainment show with magic lanterns continued until the end of the 18th century and beyond, along with occasional lectures on more serious subjects like astronomy, although the latter were rare until the 1820s. Peter Benes estimated that at least 59 itinerant showmen, entertainers, and lecturers advertised magic lantern exhibitions before 1826, mostly between 1780 and 1800.[9]

Most magic lanterns in the Colonial period probably originated in England, and there was a lively trade in both new and used magic lanterns from the 1750s onward. In 1754, the Boston merchants Gilbert and Lewis Deblois listed a wide range of goods for sale, the owner intending to depart for Europe. Among the items to be sold were a Universal single and double Microscope, a four foot Reflecting Telescope, and a Magick Lanthorn, with three Dozen Pictures.[10] Opticians, dealers in scientific instruments, booksellers, and stationers offered imported magic lanterns for sale, often included in newly arrived shipments of "fancy goods" ranging from gentlemen's swords to mirrors, jewelry boxes, combs, music boxes, and musical instruments.[11] In 1762, New York bookseller and stationer James Rivington offered "The Magick Lanthorn" along with imported musical instruments, telescopes, microscopes, thermometers, barometers, and surveying instruments.[12] In 1768, a New York merchant announced a range of goods "just imported in the *Albany*, Capt. Richards, from London. Included in the shipment was a Magick Lanthorn with sliders and objects.[13] In 1788, Charleston merchant James Jacks offered a Magick Lanthorn along with a wide range of games, household goods, and luxury items, newly arrived "by the *Catherine*, Capt. Murray, from Bristol."[14]

Some prominent citizens of the American colonies purchased their own magic lanterns on trips to Europe. For example, in 1761 General Philip Schuyler (1733-1804) undertook a business trip to London to present Major General John Broadstreet's account books to authorities. Schuyler (Fig. 2) was an astute and refined Albany aristocrat, yet was intrigued by optical apparatus. Records in the New York State Library show Schuyler purchased a theodolite, a Hadley's quadrant, reflecting telescope and a magic lantern and brought them back to the colonies.[15] Schuyler was at the time building a mansion near Albany where he and his wife, the former Elizabeth Van Rensselear, would live. Very likely, then, the Van Rensselear family and others in Albany's river coterie were treated to showings thanks to Schuyler.

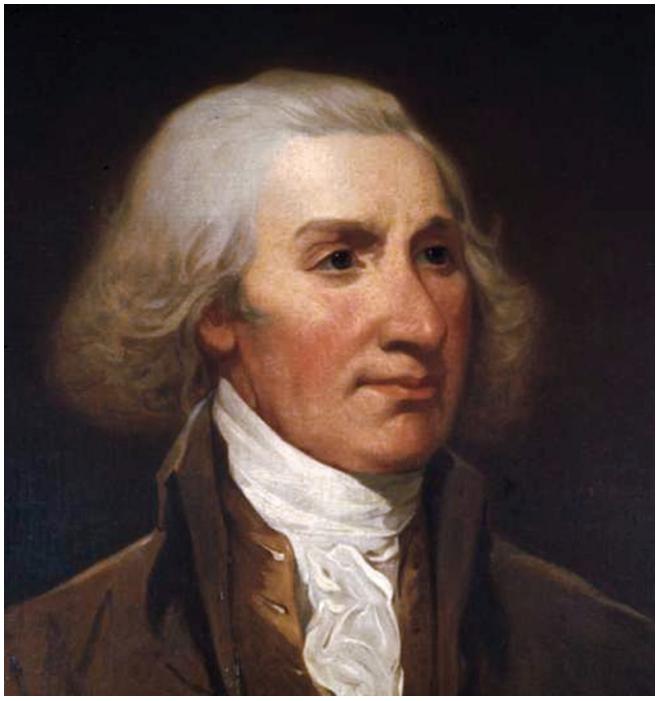


Fig. 2. Philip John Schuyler, painted by Jacob Lazarus from a miniature painted by John Trumbull. Wikimedia.

As early as the 1760s, educational institutions began to acquire their own magic lanterns. By 1766, lucky young scholars at Harvard had the opportunity to see large projections from a huge lantern obtained for the college. After this date, then, one can assume graduates coming out of Cambridge had some familiarity with the device. Harvard's lantern (Fig. 3) was donated by Rev. Robert Hale of Beverly, Massachusetts, who also provided a solar microscope. These instruments were housed in the college's Philosophy Chamber, a room dedicated to science teaching, which had to be rebuilt after a fire destroyed the original collection in 1764. Among those who advised the college on how to stock the instrument cabinet was Benjamin Franklin. Hale was thanked for his gift in a personal letter from John Winthrop (1714-1779), Professor of Mathematics, Natural and Experimental Philosophy, who used the instruments in his lectures.[16] Also in 1766, the Juliana Library-Company of Lancaster, Pennsylvania, listed among its philosophical instruments, "A Magic Lanthorn, of the best kind, with a number of Images painted on glass, and fixed in sliders." This library, founded in 1759, was modelled after Benjamin Franklin's Library Company of Philadelphia.[17]

Henry Moyes (1749-1807) had a long career as lecturer on natural philosophy, including optics, in his native Scotland and in England, despite being blind from a young age from smallpox. In the 1780s, he went on a lecture tour of major cities in the United States, including Boston, Philadelphia, Baltimore, Princeton, and

Fig. 3. Large magic lantern donated to Harvard College by Rev. Robert Hale in 1766 and used by John Winthrop in his lectures on natural philosophy. Harvard Collection of Historical Scientific Instruments.

Charleston. On his tour, he recommended to Dr. Benjamin Rush, Philadelphia physician and signer of the Declaration of Independence, that all college science laboratories include in their collection of equipment a "magic lanthorn."[18] Benjamin Rush (1746-1813) (Fig. 4) was the founder of Dickinson College, chartered in 1783, the first college founded after the formation of the United States. Several early hand-painted astronomy lantern slides are in the college archives, but the original lantern appears to be lost.[19]

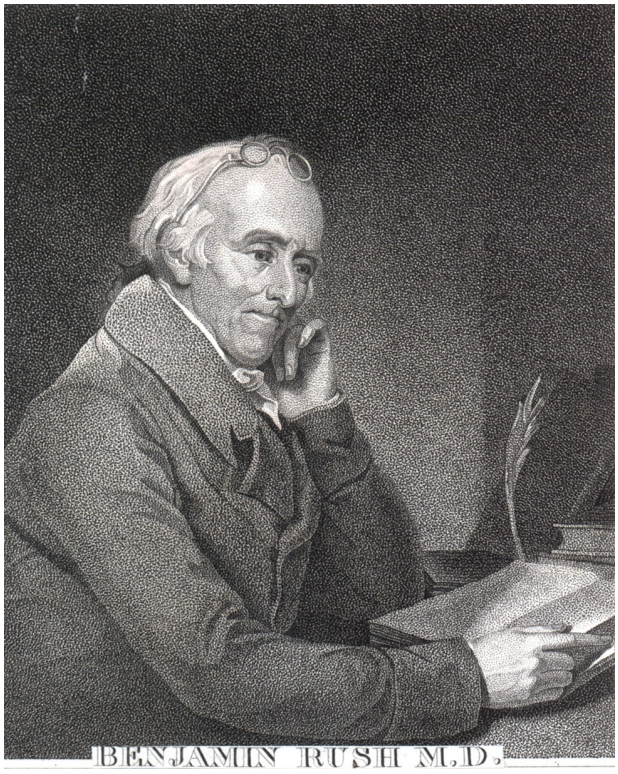


Fig. 4. Dr. Benjamin Rush, founder of Dickinson College. Smithsonian Libraries.

Educated colonials also learned about magic lanterns from their readings. In the mid-1700s volumes with discussions and schematics of lantern design began arriving on this side of the Atlantic. These included works by Kircher, Hooper, Harris, Ozanam and Euler, to name a few authors whose tomes found their way into early American libraries. Standard textbooks used by Harvard, Yale, and William and Mary to teach natural philosophy all came from Europe and all contained technical descriptions and illustrations of magic lanterns. These included two works by Jacques Rohault (1618–72), *Traité de Physique* (1671) (in a later English translation) and *System of Philosophy and Natural Philosophy* (translated from French into English by John Samuel Clarke in 1723). The two volume work by Dutch natural philosopher Willem Jacob Storm van 's Gravesande (1688–1742), *Physices Elementa Mathematica, Experimentis Confirmata sive Introductio ad Philosophiam Newtonianam* (*Mathematical Elements of Natural Philosophy Confirm'd by Experiments with an Introduction to Newtonian Philosophy*) (1719–21 and 1723) was used as well (Fig. 5). Two other important textbooks were *Course in Experimental Philosophy* (1725) by John Theophilus Desaguliers (1683–1744), a popularizer of Newtonian science, and *Elementa Physica* (*Elements of Physics*) (1734) by Pieter van Musschenbroek (1692–1761), who had studied with Desaguliers.[20] The last three authors were important in the early development of the magic lantern.[21]

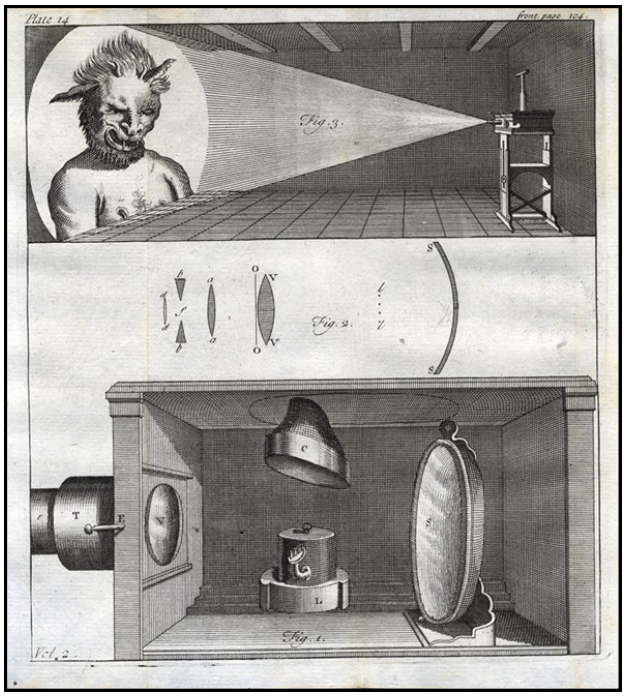


Fig. 5. Magic lantern illustration from Willem Jacob 's Gravesande: *Mathematical Elements of Natural Philosophy Confirm'd by Experiments*, 1731, vol. 2.

The Founding Fathers, Magic Lanterns, and Metaphors

No doubt Americans who traveled across the Atlantic before, during, and after the American Revolution were exposed to optical spectacles as part of the local culture. This group included Gouverneur Morris , George Washington, John Jay, John Adams, Thomas Jefferson, James Monroe, James Madison, John Quincy Adams, Charles Willson Peale, and Benjamin Franklin. Even in the absence of direct evidence of attendance at magic lantern shows, allusions to magic lanterns often showed up in their writings.

Gouverneur Morris (1752-1816) (Fig. 6) is an important case: a Pennsylvanian with some aristocratic blood in his veins, he was in Paris as confidential agent for Washington's fledgling government, and later became Minister to France in 1792, taking over the post held by Jefferson. Morris found himself surrounded by the violent turbulence of France's own revolution. The ebullient yet conservative Morris was horrified by much that he witnessed in the city of light, including the events of an evening a week after the fall of the Bastille when a street crowd displayed the guillotined head of royalist Controller General of France Joseph-Francois Foulon (1715-89) on a pike, while his headless body was dragged through the streets. Such astonishing acts of violence would continue for some time and, as one effort after another to create a workable new French government dissolved into the next, Morris feared the revolution there could not succeed. Morris wrote to President Washington on February 14, 1793:

> How all this will end God only knows, but I fear it will end badly. I will not speak of my own situation. You will judge that it is far from pleasant. I could be popular, but that would be wrong. The different parties pass away **like the shadows of a *magic lantern***, and to be well with any one of them would, in a short period, become cause of unquenchable hatred with the others.[22]

We know nothing of Morris's experience with magic lantern projections; perhaps he encountered a lantern show at a venue on the raucous Parisian boulevards. Certainly his words echo those of Voltaire, who once concluded that French ministers fell "one after another, like the figures of a magic lantern."[23] But whatever Morris' experience, his cautionary epistle to the American President is a significant and famous one. The ease with which projected images could be changed was a concept that took hold in the political consciousness and would reappear as a metaphor in the writings of other patriots.

Fig. 6. Gouveneur Morris 1783. Library of Congress.

Since Morris's letter was sent to the President, one can deduce that Washington (1732-1799) understood the nature of lantern projection. Again we have no record of how our first Chief Executive learned of this optical apparatus, but we do know that President Washington visited Harvard's Philosophy Chamber in 1789 and presumably saw the college's large magic lantern from 1766. We also know that both George and Martha Washington enjoyed theater in many forms, taking in plays and theatrical offshoots whenever they could. Theatrical companies like Hallam's American Company were not averse to including a little lantern show now and then. It is also plausible that when Washington was entertaining his step granddaughter, his beloved "Nell," Eleanor Parke Custis (1779-1852), the magic lantern might have come into play. The Custis family lived with George and Martha for a time and had experience with lanterns. As an adult Eleanor reminisced about glorious days gone by, comparing them to the colored splendor of lantern projections in a letter to Elizabeth Bordley Gibson: "**How like a magic lantern** now appear the years and persons I once knew so well."[24]

Don Diego de Gardoqui (1735-98), Spain's first Minister to the U.S., was pleased that Washington was elected President and so he marched in Washington's inaugural parade. To further celebrate the inauguration he had his staff decorate his residence with a garden, illuminations and, inside, some "moving pictures." Parade-goers could drop by after the swearing-in to enjoy the decorations or watch what were likely the projections of a magic lantern at a sort of post-inaugural party. One cabinet member who might have paid a visit was John Jay, soon to be Secretary of State. Jay (1745-1829) had negotiated with Spanish representatives to the new nation and thus would have been a familiar face to the Spanish diplomats.[25] And Jay knew of a lantern's potential—though not always in a positive way.

Jay was married to Sarah Livingston, daughter of New Jersey's governor. The Jays were quite protective of their children and avoided exposing the youngsters to such machines. In the summers they occasionally allowed the children to spend time at their maternal grandparents' Liberty Hall estate in Elizabethtown, New Jersey. Governor and Mrs. Livingston were surprised to learn that the Jay children had not experienced magic lantern projections. The Livingstons saw no harm in exposing the children to the new optical phenomenon. No doubt showings at Liberty Hall during those summer nights promptly eliminated the youngsters' screen naivete.[26]

In 1780 the brilliant Alexander Hamilton (Fig. 7) married Elizabeth Schuyler, daughter of the General, at the Schuyler estate in Albany. General Schuyler, you will recall, had lantern experience dating back to 1761 when he purchased one in London. Whether Hamilton ever saw a projection from his father-in-law's original machine we can only speculate, but in any case Hamilton found occasions to compare lantern effects to certain weak liberal (Jeffersonian "republican") political positions. For example, rock-solid Hamilton (1755/7-1804) was not at all pleased with Jeffersonian Francophiles running for office in 1801. In a plea to the electors of New York, he urged them to acknowledge the failures in France: **"Behold the magic lantern of republicanism**; the odious form of real despotism; garnished and defended by the bayonets of more than five hundred thousand men in disciplined array."

To Hamilton these candidates seemed to be enemies of the new constitution and anti-federalist to the core. France's "democracy" had become a succession of failed governments. Needing thousands in a standing army and with ineffective legislative reforms, France in Hamilton's eyes possessed only a ghostly *illusion* of democracy, for: "If a legislature is

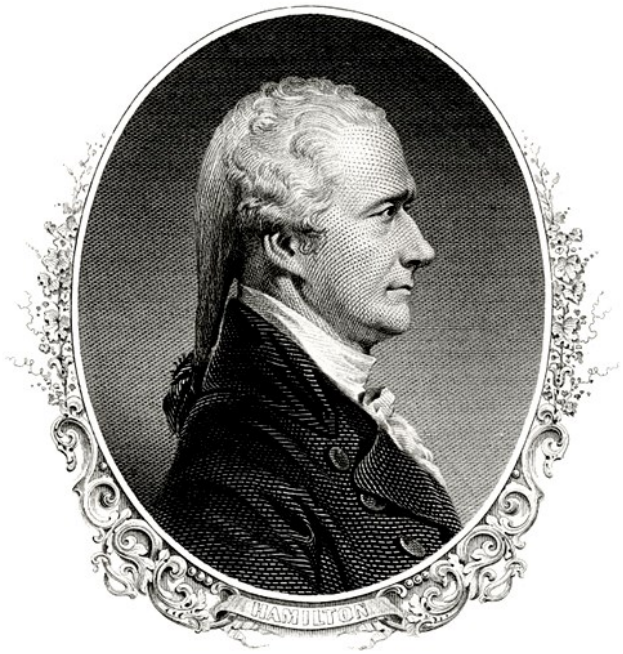


Fig. 7. Alexander Hamilton, Secretary of the Treasury. Bureau of Engraving and Printing.

not elected by the people **what exists is a 'phantom' of representation."**[27] Hamilton perceived the government [s] in Paris as mere phantom[s] of representational government projected on the screen of France's existence.

Hamilton was killed in 1804 in the infamous duel with Aaron Burr (1756-1836) of New York. Burr was himself familiar with magic lanterns and a year before the duel received a letter on the subject from his daughter, Theodosia Burr Alston, from her home in Petersburgh. Alston (1783-1813) badmouths both lantern projections and novels, finding that a novel's message comes and goes like the spiriting images of the lantern:

> [A novel's] series of events follow so rapidly, and are interwoven with remarks so commonplace and so spun out, that there is nothing left to reflect upon. A collection of images, which amuse only from their variety and rapid succession, **like the pictures of a magic lantern...**[28]

Thomas Paine raised a voice in both revolutions. He even traveled to Paris in 1791 to experience first-hand the pulse of the French revolt, although he argued to spare Louis XVI's life). A British-born free thinker and gifted wordsmith who came to America in 1774 at the urging of Benjamin Franklin, Paine (1737-1809) electrified the colonies with his pamphlet *Common Sense* (1776), which in clear language described how representational government could be established and maintained by the people. He was pleased and impressed by the progressive intellectual journey that the Founding Fathers took in the Declaration of Independence. Less important on these shores were later efforts published overseas, wherein Paine's pro-France and anti-organized religion stances found him alienating some of his readership. His *Rights of Man* (1791), was written to counter the devastating attack on the French Revolution penned by British conservative Edmund Burke (1729-1797) in *Reflections on the Revolution in France* (1790). Paine wrote these lines:

> Mr. Burke brings forward his bishops and his lantern, **like figures in a magic lantern**, and raises his scenes by contrast instead of connection.

Paine also looked to a time in the future when reasoned calm and empiricism rather than religious doctrine might prevail, and his book *The Age of Reason* (1794) warned of deceit within revealed religion and asserted that even the terror that might come from a viewing of wild magic lantern projections was not a God-sent warning:

> There are mechanical and optical deceptions. **There is now an exhibition in Paris of ghosts and spectres**, which, though it is not imposed upon the spectators as a fact, has an astounding appearance.[29]

The ghost show mentioned here probably refers to the Fantasmagorie show presented in Paris by "Philidor" (Paul de Philipsthal) in 1792 and 1793.[30]

Thomas Jefferson arrived in Paris in 1784, appointed as America's ambassador by George Washington; he departed in 1789 to become Secretary of State. Jefferson was attuned to Parisian virtues, be they optical or political, and he had ample opportunity to explore the city's popular culture. Among the attractions were cafes, billiard halls, magic lantern shows, and bookstalls.[31] Jefferson's raw intellect and fluency with languages was bolstered by a library that was without equal in America (it later became the nucleus of the Library of Congress). On lantern phenomena, for instance, he could consult Abbé Nollet's enthusiastic rundown of all sorts of optical instruments, Musschenbroek's schematics and illustrations of glass slides, plus the accounts of Hutton, Euler and Newton's *Optics*.[32]

Jefferson owned two *camerae obscurae,* built by Philadelphia scientist and instrument-maker David Rittenhouse; one still survives at Monticello. In 1786 he purchased from London instrument makers John and Peter Dollond a solar microscope, a close cousin of the magic lantern (Fig. 8). The solar microscope utilized

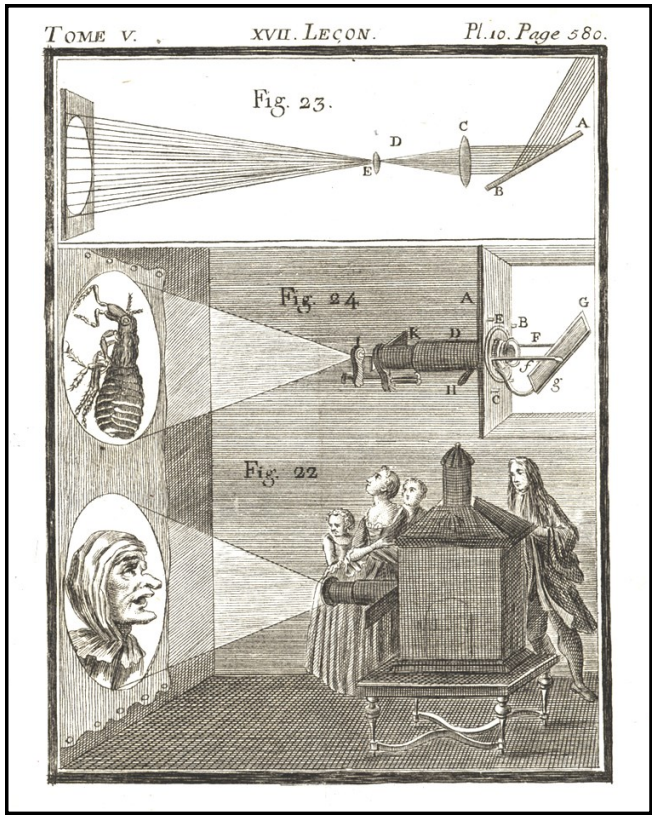


Fig. 8. The solar microscope (Fig. 23 & 24) and magic lantern (Fig. 22) from Jean Antoine Nollet: *Leçons de Physique expérimentale*, 1764, vol. 5.

sunlight instead of artificial light as a light source and often lacked painted glass slides, instead projecting images of microscopic objects and even living organisms.[33] Jefferson mentioned his solar microscope in an 1808 letter to his daughter's husband, John Wayles Eppes, suggesting that the microscope and other instruments would be useful to Eppes's son Francis:

> *DEAR SIR*
>
> *In revising my philosophical apparatus I find I have some articles to spare which will be of use to Francis when he comes to that part of his education, and may in the mean time amuse yourself. These are*
>
> *Martin's portable air pump & apparatus by Dollond*
>
> *an Hydrostatic balance by Dollond*
>
> *a Solar microscope in brass, with Wilson's pocket apparatus by Dollond*
>
> *a best barometer.*
>
> *a Camera obscura, for drawing.*
>
> *These instruments are perfect, and of the best kind, having been bought by myself in London, when I was there.*[34]

Magic lantern metaphors also can be found in Jefferson's writings. In 1807 President Jefferson echoed the phraseology of Voltaire, Hume, Gouverneur Morris, and others in a letter to Dr. Caspar Wistar (1761-1818) of Philadelphia. In a paragraph on the various medical pundits and mostly unreliable theories of medicine abounding in those days, he writes:

> *I have lived myself to see the disciples of Hoffman, Boerhaave, Stahl, Cullen, Brown succeed one another* ***like the shifting figures of a magic lantern****, & their fancies, like the dresses of the annual doll-babies from Paris, becoming from their novelty, the vogue of the day, and yielding to the next novelty their ephemeral favor'*[35]

Once retired, Jefferson told a friend how a public life allows scant time to recall and reflect:

> *From 1775 to 1809, my life was an unremitting course of public transactions, so numerous, so multifarious, and so diversified by places and persons, that,* ***like the figures of a magic lantern****, their succession was a rapidity that scarcely gave time for fixed impressions.*[36]

I find no direct evidence that Benjamin Franklin saw a magic lantern projection, and yet it seems almost impossible that he did not. After all, he was a good enough scientist to understand optical principles (and make himself a pair of bifocals), he printed broadsides around 1744 for a Philadelphia showing of a solar microscope, and purchased scientific apparatus from instrument-makers Short, Nairne, Scarlett, Marshall and Martin, all of whom sold magic lanterns from their shops. Some announcements of early magic lantern shows appeared in his newspaper, *The Pennsylvania Gazette* (see note 3). He was a founder of the American Philosophical Society and attended meetings of scientific societies in both London and Paris. He knew all of the leading natural philosophers of Europe, including Joseph Priestley, who used a magic lantern to entertain his own children . Priestley experimented with magic lanterns in school and was exposed to the textbook of 's Gravesande. Priestley also wrote about the history of the magic lantern in *The History and Present State of Discoveries Relating to Vision, Light, and Colours* (1772), attributing its invention to Athanasius Kircher. Franklin subscribed for 20 copies of the book.[37]

Franklin once met the physicist and balloon fancier Alexander Jules Caesar Charles (1746-1823), who was also a practitioner of a solar microscope. Accounts regarding the two scientists consider mostly their aeronautical interests, but it seems possible that spectacle-maker Franklin might have inquired about Charles' optical knowledge. If so, that would have proven revelatory, since Charles would tutor a young Belgian, Etienne-Gaspard Robert (1765--1837), in optical technology in 1782-83. Robert adopted the surname Robertson and under that name made improvements to lantern spectaculars and opened the famous *Fantasmagorie* in Paris in 1798.[38] An English-language version of the phantasmagoria debuted in America in 1803 and was followed by many similar shows.[39]

Although Franklin died several years before Robertson's show opened, he had an indirect connection to the Phantasmagoria. Robertson used the glass armonica (= glass harmonica), invented by Benjamin Franklin, for musical accompaniment in his shows (Fig. 9).[40] Franklin left France beloved and admired. His visage was so recognizable throughout Paris that lantern impressario Robertson paid him tribute by projecting a lantern slide of Ben's face in the Fantasmagorie and then dissolving the facial image into an image of a skull! A Franklin slide survives today in the collection of the Paris Cinematheque's museum, although curator Laurent Mannoni does not believe it is identical to the one fashioned for the Fantasmagorie.[41]

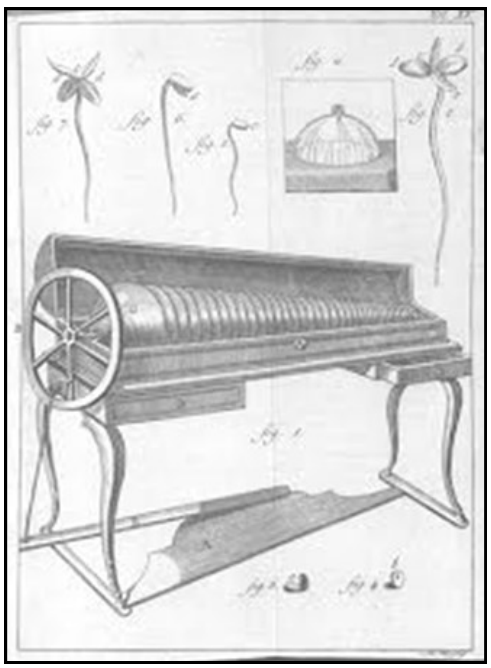


Fig. 9. Benjamin Franklin's glass harmonica, used by Robertson for music to accompany his phantasmagoria shows.

A more direct connection between Franklin and the magic lantern is through the lectures and demonstrations of his close friend Ebenezer Kinnersley (1711-1778). When Franklin first showed his electrical experiments to groups of friends in his own home, Kinnersley assisted with the demonstrations and collaborated with Franklin on some of his experiments. He soon set out on his own lecturing career, becoming a leading electrical demonstrator and advocate for Newtonian and Franklinian science. Kinnersley had trained under Desaguliers, who in turn had studied with Isaac Newton.[42] In December 1765, a Philadelphia newspaper carried this announcement:

For the Entertainment of the CURIOUS.

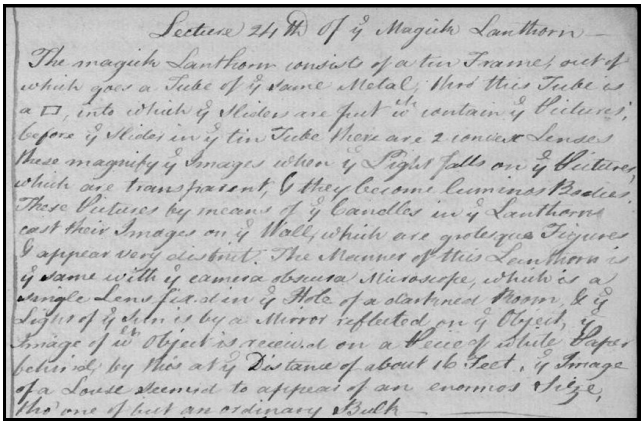
> Mr. Kinnersley proposes to exhibit, at the college in this city, on Monday and Tuesday, the 30th and 31st instant a Course of Electrical Experiments with explanatory lectures; to begin precisely at 6 o'clock in the evening. . . After the Lecture, some *entertaining representations*, will be exhibited with the Magick Lanthorn.[43]

In January 1767, a similar announcement appeared in Franklin's own newspaper, *The Pennsylvania Gazette*:

> Mr. Kinnersley proposes to continue his Course of Electrical Experiments at the College, on Sunday and Tuesday, and again on Thursday and Friday, next Week (the Weather being suitable) to begin precisely at Six o'Clock in the Evening. There will also be exhibited some some curious Representations with the Magick Lanthorn.[44]

Although John Adams (1735-1826) had read lantern passages in print, there doesn't seem to be any strong evidence that our second President witnessed a lantern showing, but it is likely that he did. For example, from 1784 to 1788 Adams and his wife Abigail (1744-1818) lived in London, where John would eventually serve as our first Minister to the Court of St. James. Both he and Abigail were prolific letter-writers, and in a July 1784 letter to her sister Elizabeth Smith Shaw (1750-1815), Abigail lovingly describes the magnificent architecture and interiors she encountered in London. She further notes that the excellence of these buildings eclipsed the impressions she had gained from "looking through Glasses." C. James Taylor, editor of the Adams Papers, maintains that this phrase was a reference to magic lantern slides she had seen of such locales.[45] If Abigail had experienced magic lantern projections, then one can logi-

cally assume that her husband had as well. We note, for example, that Adams toured Harvard College August 22, 1770 with Professor John Winthrop (1714-1779) (Fig. 10). Adams's diary entry on the visit has this: "Mr. Professor Winthrop shewed Us the College, the Hall, Chappell, Phylosophy Room, Apparatus, Library and Museum."[46] What "apparatus" was there to see? Well, a telescope certainly was there, along with, most likely, a sextant, vacuum pump, microscope, *camera obscura* and maybe even a solar microscope, plus the large lantern of 1766.[47]



Lecture 24th Of ye Magick Lanthorn

The magick Lanthorn consists of a tin Frame; out of which goes a Tube of ye same Metal, Where this Tube is a □, into which ye Sliders are put to contain ye Pictures, before ye Slider in ye tin Tube there are 2 convex Lenses these magnify ye Images when ye Light falls on ye Pictures which are transparent, & they become luminous Bodies. These Pictures by means of ye Candles in ye Lanthorns cast their Images on ye Wall, which are grotesque Figures & appear very distinct. The Manner of this Lanthorn is ye same with ye camera obscura & Microscope, which is a single Lens fixed in ye Hole of a shuttered Room, & ye Light of ye Sun is by a Mirror reflected on ye Object, ye Image of ye Object is received on a Piece of white Paper held by this at ye Distance of about 16 Feet, ye Image of a Louse seemed to appear of an enormous Size, tho' one is but an ordinary Sight

Fig. 10. Manuscript of the section on the magic lantern in John Winthrop's course of lectures on natural philosophy 1772-1774. HUC 8772.358, Harvard University Archives.

Sixteen years later John Adams's son, John Quincy Adams (1767-1848) (Fig. 11) was a student at Harvard and attended lectures in the Philosophy Chamber on natural philosophy by Samuel Williams (1743-1817), Hollis Professor of Mathematics and Natural Philosophy at Harvard from 1780 to 1788 (Fig. 12).[48] The lecture on optics included a demonstration of the magic lantern, as described in Adams's diary for June 1 and 2, 1786:

June 1

We had this forenoon a Lecture from Mr. Williams. Upon the reflection and the refraction of light. It is not usual for him to give Lectures on Thursdays, as many of both the Classes, are always absent on that day; as was the Case to day, not above half being present. But he has been so long prevented, by the weather, from giving any, that he is obliged to take the first fair day that happened: he has yet given but fourteen Lectures, it is said he has ten more to give, and must finish before the 21st. of this month. The Lecture was not to me so entertaining as some have been.

Fig. 11. John Quincy Adams by John Singleton Copley 1796. Boston Museum of Fine Arts.

June 2

We had another Lecture from Mr. Williams to day, with an explanation of the different optical Instruments, that are most commonly made use of. But there was such a flocking to see through the microscope, and the magic Lantern, and the camera obscura, that something got broke, and Mr. Williams, shew nothing more after it.[49]

Fig. 12. Samuel Williams, who delivered lectures on natural philosophy attended by John Quincy Adams.

John Quincy Adams also spent time in Paris in 1815 and while there took his two sons to a showing of the *Fantasmagorie.* In his diary Quincy Adams mentions that, at 3½ hours, the performance was too long, an on-stage magician was outstanding, but the projected images left him a bit cold:

> *It's a combination of experiments in natural philosophy, optical illusions, and sleight of hand—one machine [projecting] the figure of a man who blows the trumpet; and one [projecting] the form of a child who by mechanical operation utters articulate sounds—distinct words—the least amusing part of the exhibition is the phantasmagorie--the sleight of hand is by a Mr. Brasci superior to anything I ever saw of the kind. They kept us from half past seven to eleven o'clock.*[50]

In the late 18th century, there was a growing desire among certain individuals to go beyond curiosity cabinets and private collections to exhibitions of historical or cultural artifacts for an increasingly inquisitive public in a "museum" or institution, following examples which existed in Europe. For a fee, museums sometimes offered city dwellers a chance to see lantern projections on a more regular basis. Initially the most famous ones were in Philadelphia, where residents could attend screenings at museums such as du Simitiere's or Charles Willson Peale's American Museum.

Peale (1741-1827) (Fig 13), renowned portraitist, taxidermist, and curator, was thrilled by visual phenomena. Correspondence in the Peale papers at the American Philosophical Society indicates that lantern screenings were held at least by 1795. Years later, the subjects of Peale's showings, largely chosen by his son Rubens, included tours of the solar system, chemical formulae, the seven wonders of the world, unique travel destinations, and more gimmicky mechanical slides which showed movement. Several of Peale's sons became so adept at the apparatus thatthey left Philadelphia to work in similar museums in other cities, complete with lantern showings. The drawing power of Peale's Philadelphia museum was impressive: the men who became our first five Presidents—Washington, Adams, Jefferson, Madison and Monroe—all visited at one time or another, but did any of these patriots witness a lantern show at Peale's? We can't be certain. [51]

In any case, James Madison (1751-1836) and his friend James Monroe (1758-1831) discussed lantern purchases in letters exchanged in their home state of Virginia.[52] In 1808 Madison was informed by one William C. C. Claiborne that a New Orleans-based group was proposing a weekly paper to be called "The Magic Lantern."[53] And what about Madison's wife, Dolley—did she see or even use a magic lantern? Although Dolley Payne Todd Madison (1768-1849) was a prominent figure in Washington's social circles, there is little evidence that, either as White House hostess during Jefferson's Presidency nor as "First Lady" (Madison succeeding Jefferson as President in 1809), Dolley provided lantern entertainment for a White House function. However, when Dolley died at age 81, her estate included: "1-picture-magic lantern."[54]

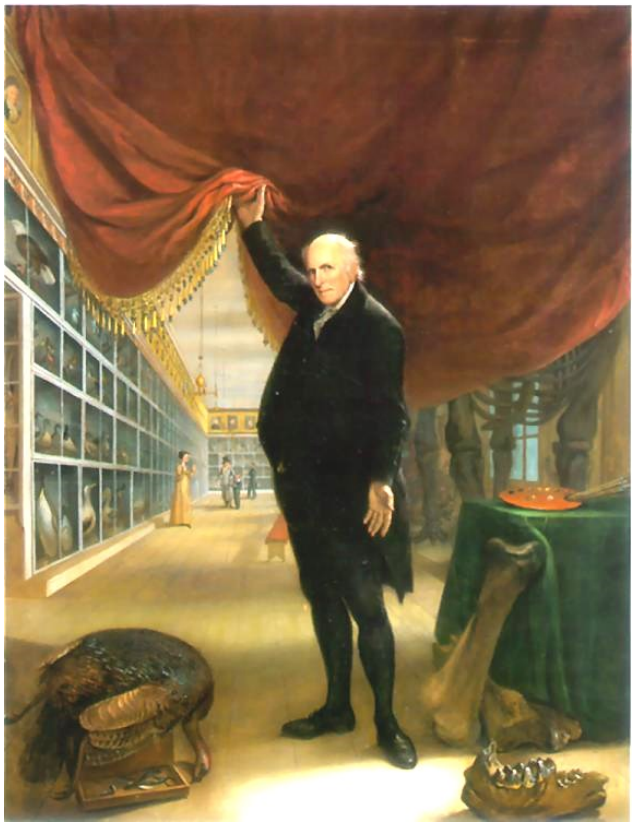


Fig. 13. "The Artist in His Museum," self-portrait by Charles Willson Peale 1822. Pennsylvania Academy of Fine Arts.

H. Mark Gosser is employed in the Technical Services Department of the Montgomery County-Norristown [PA] Public Library. He was previously on the staff of *TV Guide* for 30 years. He received a B.A. in Cinema from the University of Southern California and an M.A. in Communication with Film emphasis from Temple University. He has done extensive research in libraries, archives, and museums in Europe and the United States on the prehistory and early history of cinema. He has published in *Film History*, *Cineaste*, *History of Photography*, and other journals on topics from Athanasius Kircher to the Lumière Brothers and Thomas Edison. He edited a special issue of *Quarterly Review of Film Studies* (1984) on archaeology of the cinema, featuring some of the leading cinema historians of the period.

Notes and References

1. For 18th century entertainments in London, see: Richard D. Altick. 1978. *The Shows of London* (Harvard University Press, Cambridge, MA). For colonial population sizes, see: Steve Wiegand, "The population explosion in 1700s America" (https://www.dummies.com/education/history/american-history/the-population-explosion-in-1700s-america/). For early 18th century entertainments in Philadelphia, see: Andrew Davis. 2010. *America's Longest Run: a History of the Walnut Street Theatre* (Penn State University Press, University Park, PA).

2. For European itinerant magic lantern showmen, see: Deac Rossell. 2011. *Laterna Magica/Magic Lantern*, vol. 1 (Füsslin Verlag, Stuttgart, Germany), pp. 102-143. For early American visual entertainments, see: Wendy Bellion "Object Lessons: Pleasing Deceptions," Common-Place, 3 (1) (October, 2002). www.common-place.org. Wendy Bellion. 2011. *Citizen Spectator. Art, Illusion & Visual Perception in Early National America* (University of North Carolina Press, Chapel Hill). See also: Peter Benes. 2016. *For a Short Time Only. Itinerants and the Resurgence of Popular Culture in Early America* (University of Massachusetts Press, Amherst). For scientific interests of the Founding Fathers, see: I. Bernard Cohen. 1997. *Science and the Founding Fathers: Science in the Political Thought of Thomas Jefferson, Benjamin Franklin, John Adams, and James Madison* (W. W. Norton & Company, New York).

3. *Pennsylvania Gazette*, February 17, 1743 (same ad February 24, March 10, 1843). *The Pennsylvania Gazette* was published by Benjamin Franklin.

4. For Brickell's career as an intinerant showman, see Benes 2016, p. 159 (see note 2).

5. [John Dabney], magic lantern advertisement, *The Boston Evening Post*, December 3/5, 1743. "Old Tenor" was a nickname for paper money issued by the Massachusetts Bay colony. In 1751, the colonial assembly ordered the currency removed from circulation.

6. Benes 2016, p. 159; (see note 2). Peter Benes, "Table 8.1 Itinerary of Richard Brickell (fl. 1742-56) During the Fourteen-Year Period He and His Company Worked in North America" (2016). *For a Short Time Only*. 8.
https://scholarworks.umass.eduumpress_short_time_only/8

7. *New York Evening Post*, September 8, 1746 (same ad appeared on September 15). Use of the names Friar Bacon and Dr. Faustus was meant to add magic to the lantern by invoking ancient necromancers. Roger Bacon was a 13th century monk who experimented with optics, including projecting images with a concave mirror, but he lived centuries before the invention of the magic lantern. Dr. Faustus is a figure from German legend and literature dating to at least the early 16th century, again before the invention of the magic lantern.

8. *New-York Mercury*, April 13, 1767. On other Hymes shows, see Benes 2016, pp. 163-164 (see note 2).

9. Benes 2016, p. 164 (see note 2).

10. *The Boston Gazette*, May 21, 1754.

11. For marketing of magic lanterns in 18th and early 19th century America, see: Kentwood D. Wells. 2010. Magic lanterns: Christmas toys for boys. *The Magic Lantern Gazette* 22 (1):3-29.

12. *The New-York Gazette*, February 1, 1762, p. 3.

13. *New-York Gazette or The Weekly Post-Boy*, June 6, 1768, p. 4.

14. *City Gazette and Daily Advertiser* (Charleston, South Carolina), May 23, 1788.

15. Warren Roberts. 2010. *A Place in History* (State University of New York, Albany), p.6.

16. Barbara Maria Stafford and Frances Terpak. 2001. *Devices of Wonder. From the World in a Box to Images on a Screen* (Paul Getty Trust, Los Angeles CA), pp. 298-299. Ethan W. Lasser, ed. 2017. *The Philosophy Chamber: Art and Science in Harvard's Teaching Cabinet, 1766–1820* (Harvard Art Museums, Cambridge, MA). Jean-François Gauvin. 2019. The next level of play. How Cartesian Devils, volcanoes, and quantum toys taught general science at Harvard, 1730-1970. *Journal of the History of Collections* 31: 531–546.

17. *The charter, laws, catalogue of books, list of philosophical instruments, &c. of the Juliana Library-Company, in Lancaster. To which are prefixed, some reflections on the advantages of knowlege; the origin of books and libraries. . . .* (1766). Early American Imprints, Series I. Charles I. Landis and Thomas Penn. 1919. The Juliana Library Company in Lancaster. *The Pennsylvania Magazine of History and Biography* 43: 24-52.

18. John Anthony Harrison. 1957. Blind Henry Moyes, "an excellent lecturer in philosophy." *Annals of Science* 13:109-125. Kentwood D. Wells. 2015. The magic lantern in American churches before 1860. *The Magic Lantern Gazette* 27 (4):3-33.

19. http://archives.dickinson.edu/artifacts/magic-lantern-slides

20. Ronald S. Callinger, Ekaterina (Katya) Denisova, and Elena N. Polyakhova. *Leonhard Euler's Letters to a German Princess. A Milestone in the History of Physics Textbooks and More*. Chapter 1. Physics textbooks: origins before 1650 and principal natural philosophies and physics textbooks of the Enlightenment (https://iopscience.iop.org/chapter/978-1-64327-192-7/bk978-1-64327-192-7ch1.pdf).

21. Rossell 2011 (see note 2).

22. Letter, Gouverneur Morris to George Washington, February 14, 1793. Among other sources, see: http://oll.libertyfund.org.

23. Voltaire: see, for example, James Sullivan, ed., 1927. *The History of New York State* (New York: Lewis Historic Publishing Co.) Bk. XI, Ch. 1, pt. VIII.

24. George Washington's visit to Harvard's Philosophy Chamber: Lasser 2017 *Philosophy Chamber*, p. 263 (see note 16). Letter, Eleanor Parke Custis Lewis to Elizabeth Bordley Gibson, quoted in Patricia A. Brady, ed. 1991. *George Washington's Beautiful "Nell": The Letters of Eleanor Parke Custis Lewis to Elizabeth Bordley Gibson, 1794-1851* (University of South Carolina, Columbia), p. 259.

25. http://en.wikipedia.ordwiki/spain%E2%80%93United_States_relations.

26. Jay/Livingston material: E. Brockholst Livingston. 1920. *The Livingstons of Livingston Manor* (The Knickerbocker Press, New York), p. 455 et seq., and Theodore Sedgwick. 1833. *A Memoir of the Life of William Livingston* (J. & J. Harper, New York).

27. Both Hamilton quotes: Henry Cabot Lodge, ed. 1904. *The Works of Alexander Hamilton* (G. P. Putnam's Sons, New York), 8: 226-227.

28. Letter, Theodosia Burr Alston to Aaron Burr, October 21,1803, www.familytales.org/dbDisplay.php?id=Hr_tba2315. Or see Matthew L. Davis, Project Gutenburg's *Memoirs of Aaron Burr*, v. 2 (1836).

29. Quote on Burke: Thomas Paine, *Rights of Man* Part [the] First (London, 1791), p. 40; Optical deceptions in Paris quote: Thomas Paine, "The Age of Reason," in [Thomas Paine], *Complete Writings*, ed. Philip S. Foner (New York: Citadel, 1945), I: 508.

30. Mervyn Heard. 2006. *Phantasmagoria. The Secret Life of the Magic Lantern* (The Projection Box, Hastings UK), pp. 76-77.

31. William Howard Adams. 1997. *The Paris Years of Thomas Jefferson* (Yale University Press, New Haven CT), p. 59.

32. Douglas L. Wilson. 1996. *Jefferson's Books* (Thomas Jefferson Memorial Foundation, New York).

33. https://www.monticello.org/site/research-and-collections/microscopes. London purchase of solar microscope: *Jefferson's Memorandum Books, 1786* https://founders.archives.gov/documents/Jefferson/99-01-02-8100. See also: Cohen 1997 (see note 2), p. 45.

34. Letter from Thomas Jefferson to John Wayles Eppes, 4 June 1808 https://founders.archives.gov/documents/Jefferson/99-01-02-8100.

35. Letter, Thomas Jefferson to Caspar Wistar, June 21, 1807, in: Albert Ellery Bergh, ed. 1905. *The Writings of Thomas Jefferson* (Thomas Jefferson Memorial Association, Washington, D. C.) 14: 426-428.

36. Letter, Thomas Jefferson to Gideon Granger, Esq., March 9, 1814, in Bergh, 14: 111-112.

37. Robert E. Schofield. 1997. *The Enlightenment of Joseph Priestley: A Study of His Life and Work from 1733 to 1773* (Penn State Press, University Park PA), p. 41, 243. H. A. Houston. 1957. Athanasius Kircher and the magic lantern. *Science Progress* 45:462-464. At a meeting of chemists in Philadelphia in 1922, Dr. Edgar F. Smith, President of the American Chemical Society, delivered a lecture on Priestley, at which he exhibited various Priestley artifacts, including the "Original 'magic lantern' of Priestley, used by him to entertain his children (with slides)." See: *The Catalyst* 8 (1) (January 1923), p. 10.

38. Laurent Mannoni. 2000. *The Great Art of Light and Shadow*, translated by Richard Crangle (University of Exeter Press, Exeter UK) p. 148. Heard (2006) *Phantasmagoria* (see note 30).

39. X. Theodore Barber. 1989. Phantasmagorical wonders: the magic lantern ghost show in nineteenth-century America. *Film History* 3:73-86.

40. The Glass Armonica. Benjamin Franklin's magical musical invention. **https://glassarmonica.com/armonica/phantasmagoria.php**

41. Franklin slide, collection of the Cinematheque Francaise; reproduced in Francoise Levie. 1990. *Etienne-Gaspard Robertson: La Vie d'un Fantasmagorie* (Les Editions du Preambule et Sofidoc, Paris), p. 106.

42. James Delbourgo. 2006. *A Most Amazing Scene of Wonders. Electricity and Enlightenment in Early America* (Harvard University Press, Cambridge MA), pp. 87-101.

43. *Pennsylvania Journal*, December 19, 1765.

44. *Pennsylvania Gazette*, January 8, 1767.

45. Letter, Abigail Adams to Elizabeth Smith Shaw Peabody, July 28-29, 1784, in C. James Taylor, ed. 2015. *Founding Families: Digital Edition of the Papers of the Winthrops and Adamses*, ed. by (Massachusetts Historical Society, Boston); http://Founders.Archives.gov/documents/Adams/04-05-02-0212, #375.

46. [John Adams], *The Diary of John Adams*, Diary 15, August 22, 1770, folio 44, in *Adams Family Papers: An Electronic Archive*, https://www.masshist.org/digitaladams/archive/

47. Lasser 2017 *Philosophy Chamber* (see note 16).

48. Papers of Samuel Williams https://hollisarchives.lib.harvard.edu/repositories/4/resources/4036

49. *Diary of John Quincy Adams* [June 1786], *Founders Online*, https://founders.archives.gov/documents/Adams/03-02-02-0001-0004.

50. For JQA's lantern experiences and also with peep shows, see William L. Chew III. 2013. John Quincy Adams: American tourist in Paris, 1815. *La Revue Napoleonica* 18: 84-125.

51. Charles Coleman Sellers. 1980. *Mr. Peale's Museum* (W. W. Norton & Co., New York), p. 351, note 27. For a detailed discussion of magic lanterns and other visual spectacles at the Peale museums in Philadelphia, Baltimore, and New York, see: Bellion. 2011. *Citizen Spectator* (see note 2).

52. Madison/Monroe letters, see: http://www.montpeliersearch.org/text/historic/hs_miller_1991.

53. Letter, William C. C. Claiborne to James Madison, March 17, 1808 in Founding Fathers Early Access Collection, James Madison papers https://rotunda.upress.virginia.edu/founders/FOEA.html

54. Of items listed in Dolley's estate, "1-picture magic lantern was #34.

Fig. 14. Nineteenth century lantern slide of George Washington. Wells collection.

Martyn Jolly and Elisa deCourcy, eds. 2020. *The Magic Lantern at Work. Witnessing, Persuading, Experiencing and Connecting.* Routledge, New York and London. 213 pages. ISBN-13: 978-0-367-32256-4. $155.00 (hardcover) (Kindle edition is cheaper).

This book originated from an academic conference on "Heritage in the Limelight: The Magic Lantern in Australia and the World," held in Australia in 2018. It deserves a wide audience among magic lantern scholars and those with a more casual interest in magic lantern history, although the publisher's decision to offer it at a ridiculously high price makes this less likely.

Contributors come from Australia (primarily), New Zealand, Belgium, the United Kingdom, Germany, and the United States. The eleven chapters cover a wide range of topics, including the use of the magic lantern by missionaries, temperance activists, suffragists, and lecturers on art, science, and social issues such as the Armenian Genocide. All are based on new archival research and many make use of lantern slide collections that have been hidden in various institutional and private hands. The authors include seasoned magic lantern researchers and younger scholars.

A one-page review cannot do justice to the full range of topics covered here, so I will focus on a selection of chapters that I found particularly interesting. Jennifer Tucker, who has previously written a book on photography and science, provides an overview of "Magical Attractions: Lantern Slide Lectures at British Association for the Advancement of Science Meetings, ca 1850 -1920." Meetings of this society rotated among British and Irish cities, and starting in the 1880s, to Australia, Canada, and South Africa as well. They attracted a mixed audience of professional scientists and the general public. Carpenter's phantasmagoria lantern was demonstrated at a meeting in 1839, and lantern slides were a prominent feature of lectures until the early years of the 20th century. The author focuses on the many ways lantern slides were used and the role of the BAAS as a venue for dealers in lantern slides and equipment to show off their products.

Another science-oriented chapter is "The Endless Universe and Eternal Life: Clement L. Wragge's Magic Lantern Lectures" by Shawn Higgins. Wragge was a colorful character who gave lantern lectures on meteorology, astronomy, and Theosophy in Australia from 1900 to 1922, providing audiences with a mixture of science and entertainment. Higgins traces his career as a lecturer using archival sources including his correspondence, several personal scrapbooks, and 350 of his surviving slides.

Medical lectures are the focus of Joe Kember's chapter on "Anna Mary Longshore Potts and the Anglophone Circuit for Lantern Lecturing in the Late Nineteenth Century." Dr. Longshore Potts was one the first American women to obtain a medical degree, but spent most of her career as a stereopticon lecturer, not as an established medical practioner. I have briefly written about career as a lecturer in *The Magic Lantern*, especially her lectures in North America. Kember focuses mostly on her foreign lecture tours, especially her second tour of English-speaking countries in the 1890s. Her lectures were mostly on women's health, especially sex education, delivered to "ladies only" audiences, while her lecture partner J. Charles Harrison dealt with "men only" topics. Kember uses their lecture tours to examine the broader network of international traveling lantern lecturers that developed from the 1880s onward into the 20th century.

Jane Lydon's chapter on "'We Fighters on the Outposts': Suffragists and Lantern Slides, 1889-1913" describes the work of two women's rights activists, Jessie Ackermann and Muriel Matters who both used lantern slides in their lectures, but approached the subject from different viewpoints. Ackermann was a transplanted American who traveled widely and lectured on temperance and women's rights across the Australian colonies starting in 1889. She focused her efforts on the rights of "civilized" white women, conspicuously omitting rights of indigenous Australians. White Australian women actually won the right to vote before their sisters in Britain. Australian-born Muriel Matters traveled to Britain in 1905 and used the experience of Australian women to illustrate what could be achieved by those in Britain. Her political philosophy was very different from Ackermann's, being influenced by the radical Russian anarchist Peter Kropotkin. She was quite the showperson, combining lantern slide lectures with stunts such as dropping leaflets from an airship. She returned to Australia in 1910 and went on an extended lecture tour for women's rights, drawing on her experiences in Britain.

Jane Clark tells the story of "Sidney Dickinson, 'One of the Most Entertaining Speakers Ever Upon the Melbourne Platform,'" who arrived in Australia with his wife Marion in 1888 and began an active lecture tour with a stereopticon operated by his wife and slides on travel and art history. Marion became an important part of the traveling show. She developed a strong interest in spiritualism and not only recited poetry, but conducted séances and palm readings.

These and other chapters in this book together make a fine contribution to the growing field of magic lantern scholarship.—**The Editor.**

Above: Late 19th century lantern slide of Thomas Jefferson, Benjamin Franklin, and John Adams drafting the Declaration of Independence in 1776. Wells collection.

Front cover: Late 19th century lantern slide of George Washington and other Founding Fathers at the Constitutional Convention in 1787. Wells collection.